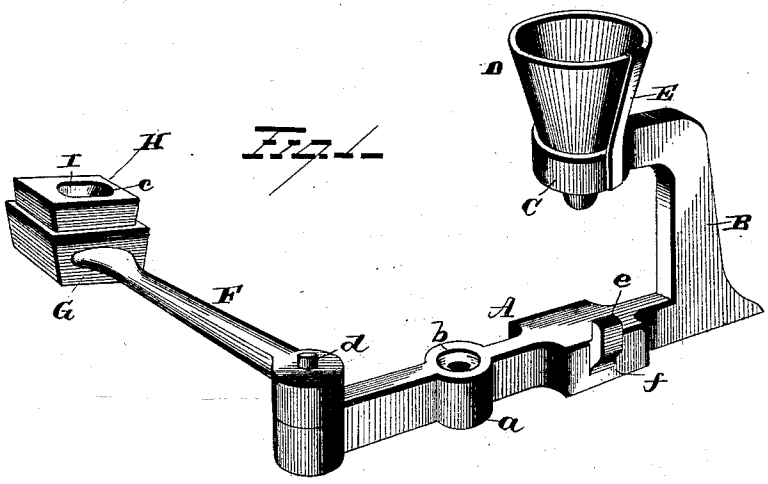
(No Model.)

W. H. ALBACH & A. J. WHITE.

CAPSULE FILLER.

No. 317,482. Patented May 12, 1885.

Fig. 1.



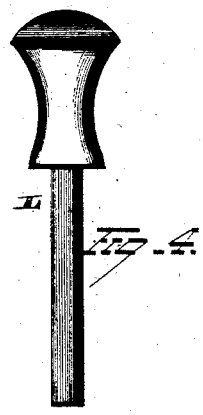


Fig. 4.

Fig. 2.

Fig. 3.

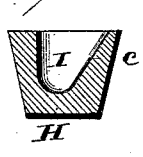
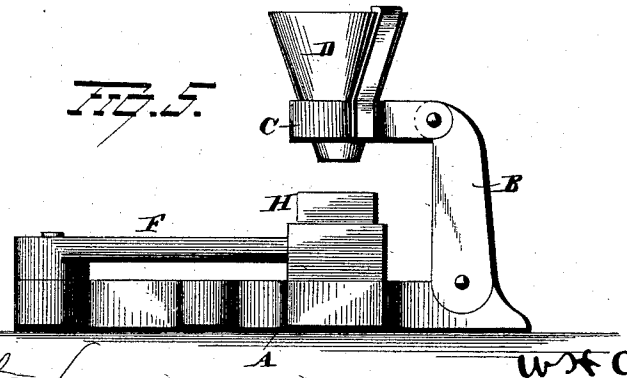


Fig. 5.



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UNITED STATES PATENT OFFICE.

W. HARRISON ALBACH AND ADDISON J. WHITE, OF MANSFIELD, OHIO.

CAPSULE-FILLER.

SPECIFICATION forming part of Letters Patent No. 317,482, dated May 12, 1885.

Application filed January 26, 1884. Renewed November 13, 1884. (No model.)

To all whom it may concern:

Be it known that we, W. HARRISON ALBACH and ADDISON J. WHITE, of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Capsule-Fillers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to an improvement in devices for filling capsules, the object being to provide a device of this character which shall be simple and economical in construction, and at the same time efficient in use; and with these ends in view our invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view showing our improved device in readiness for receiving the capsule. Fig. 2 is a view thereof showing the parts in position for filling the capsule. Fig. 3 is a detached sectional view of the holding-block. Fig. 4 is a view of the plunger. Fig. 5 is a modification.

A represents the base, provided at one end thereof with an upwardly-extending arm, B, the upper end of which latter is bent inwardly and parallel with the base A. On the end of this arm is formed a horizontal ring, C, adapted to support a funnel, D. The inner surface of the ring C is beveled to conform to the shape of the funnel, which latter is removably held in position by the spring-catch E, the lower end of which is secured to the ring, and having the upper end bent to fit over the upper edge of said funnel. By simply pulling back the upper end of the catch E the funnel may be removed or placed in position, as desired. The funnel is shaped regularly throughout its length, being void of a tube on the lower end, such as are formed on funnels in common use, the lower end of the funnel extending through the ring C far enough to strike the edge of the capsule when the latter is in its slanting position. The base A is also provided with a widened portion, *a*, centrally provided with a hole, *b*, for the passage of a screw, by means of which the device may be secured to the counter, shelf, block of wood, or to any other desired foundation, the said base, arm, and ring being preferably cast in one piece. To the other end of the base A is pivotally secured one end of the swinging arm F, the opposite end of which latter is provided with the rectangular support G, preferably formed integral therewith, and open at both its upper and lower ends, the sides of said support being beveled. In this support fits the block H, provided with the hole I, one side of which is vertical and the other side, *c*, slanting, thereby forming the top of the hole larger than the bottom.

When the arm F is turned on the pivot *d* the hole I in the block H is brought directly under the funnel, at which point the support strikes a projection, *e*, formed on the widened portion *f* of the base. If desired, a lug or projection may be formed on the under side of the widened portion *f*, and the end thereof sharpened, said lug being adapted to penetrate the foundation and assist in securing the base A thereto. When it is desired to use our improved filler, a capsule is placed in the hole I in the block H, and allowed to rest against the slanting side of said hole, thereby elevating one edge of the capsule higher than the other. The arm F is then swung around, the highest edge of the capsule, which is that portion of the edge farthest from the funnel, striking the lower end of the funnel, and raising the capsule to a perpendicular position as the arm is turned. When the arm strikes the projection on the base, the lower end of the funnel has entered the capsule, and the latter is then in readiness for filling. The powder or material is poured in the funnel, which falls in the capsule, and is packed by means of the plunger L, (shown in Fig. 4.) This plunger is made of any suitable material and shape, the end being somewhat smaller in diameter than the capsule, to allow it to enter the latter and pack the contents. After the capsule has been packed the arm F is swung back, the lower end of the funnel carrying the upper end of the capsule against the slanting side of the hole I in the block, thereby allowing the funnel to pass out of the same. The capsule may then be removed and another inserted, to be filled by a similar operation.

By constructing the block detachable from the support G, and the funnel detachable from its ring, blocks with different-sized holes and

correspondingly-sized funnels may be employed to conform to the different-sized capsules.

Fig. 5 shows a modification of our improved device wherein the block H is made stationary and the arm B pivotally secured to the base A, as shown by dotted lines. This arm B is also made in two sections, which are pivotally secured together at the angle, as also shown by dotted lines. The slanting side *c* of the recess I, formed in the block H, allows the capsule to slant in a direction away from the arm B. When it is desired to use this machine, the arm B is swung back and the capsule placed in position in the block H. The arm B is then swung back, the horizontal portion thereof being carried over the top of the capsule and then back in position, thereby inserting the end of the funnel in the top of the capsule and raising the same in a vertical position. The capsule is then filled as before described, and the arm B lifted from the capsule and swung backwardly, to allow of the extraction of the filled capsule and the insertion of another.

Our invention is exceedingly simple in construction, is of few parts, is easily operated, and can be produced at a small initial cost.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a capsule-filling machine, the combination, with a funnel, of a laterally-movable arm provided with a capsule-holding device, which latter is adapted to hold the capsules in contact with the lower end of the funnel, substantially as set forth.

2. In a capsule-filling machine, the combination, with a funnel, of a movable arm provided with a recessed end, and a removable block for holding the capsule.

3. The combination, with the base provided at one end with an upwardly-extending arm, of a funnel removably secured to the latter, an arm pivoted to the base, and a block secured to the said latter arm and adapted to carry the capsule beneath the funnel, substantially as set forth.

4. The combination, with the base provided with an upwardly-extending arm, of a funnel secured to the end of the latter, a swinging arm pivoted to the base, and a block detachably secured to the free end of said latter arm and provided with a recess, one side of which is made slanting, substantially as set forth.

5. The combination, with the base and an upwardly-extending arm formed thereon, the end of said arm being provided with a supporting-ring, of a funnel removably secured in said ring, an arm pivotally secured to the base and provided on its end with a support, and a block adapted to fit in said support and provided with a recess, one side of which is made slanting, substantially as set forth.

6. The combination, with the base A, provided with the arm B and hole *b*, of a funnel, D, an arm, F, provided with the support G, block H, provided with the hole I, and the plunger L, all of the above parts combined and adapted to operate substantially as and for the purpose described.

7. In a capsule-filling machine, the combination, with a base provided with a funnel-supporting arm, and a funnel secured to said arm, of a recessed block for holding the open end of one section of a capsule in contact with the lower end of the funnel.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

W. HARRISON ALBACH.
ADDISON J. WHITE.

Witnesses:
I. S. DONNELL,
SAMUEL MARRIOTT.